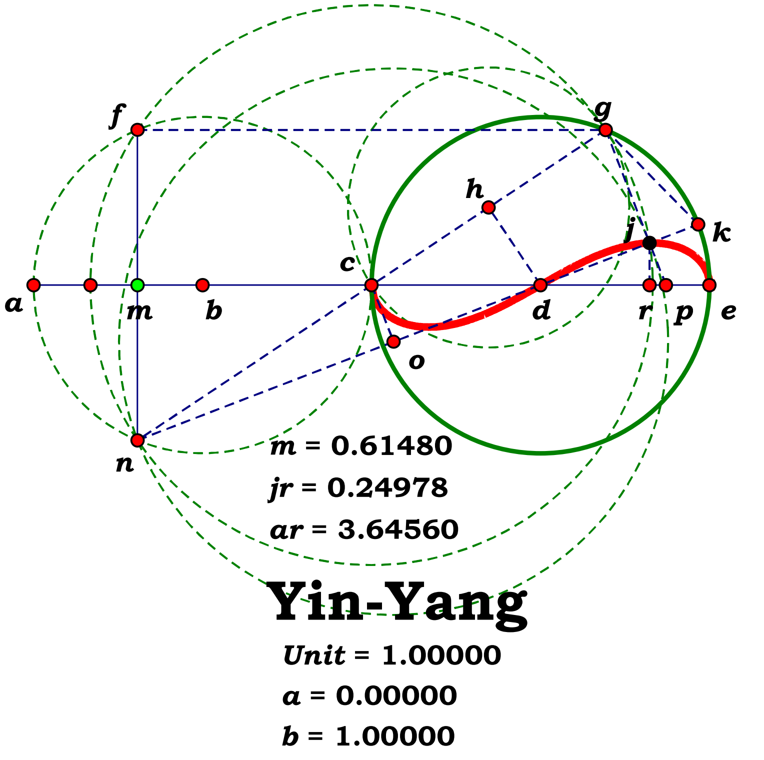
Yin-Yang



Given:

$ab := 1 \quad am := .61480$

Descriptions:

$bc := ab \quad cd := ab \quad de := ab \quad ac := 2\cdot ab$

$cm := 2 - am \quad fm := \sqrt{am\cdot cm} \quad fn := 2\cdot fm$

$fg := 2\cdot cm \quad gn := \sqrt{fn^2 + fg^2}$

$cn := \sqrt{fm^2 + cm^2} \quad dm := cd + cm$

$dn := \sqrt{dm^2 + fm^2} \quad do := \dfrac{dm\cdot cd}{dn}$

$co := \dfrac{fm\cdot cd}{dn} \quad dh := \dfrac{co\cdot dn}{cn} \quad hn := \sqrt{dn^2 - dh^2} \quad jn := \dfrac{hn\cdot gn}{dn} \quad dj := jn - dn$

$dp := \dfrac{dn\cdot dj}{dm} \quad dr := \dfrac{dm\cdot dj}{dn} \quad jr := \dfrac{fm\cdot dj}{dn} \quad jr = 0.24978$

$mr := dm + dr \quad ar := mr + am \quad ar = 3.6456$

Definitions:

$bc - 1 = 0 \quad cd - 1 = 0 \quad de - 1 = 0 \quad ac - 2 = 0 \quad cm - (2 - am) = 0 \quad fm - \sqrt{2\cdot am - am^2} = 0$

$fn - 2\cdot\sqrt{2\cdot am - am^2} = 0 \quad fg - (4 - 2\cdot am) = 0 \quad gn - \sqrt{(16 - 8\cdot am)} = 0 \quad cn - \sqrt{(4 - 2\cdot am)} = 0$

$dm - (3 - am) = 0 \quad dn := \sqrt{(9 - 4\cdot am)} \quad do - \dfrac{(3 - am)}{\sqrt{(9 - 4\cdot am)}} = 0 \quad co - \dfrac{\sqrt{2\cdot am - am^2}}{\sqrt{9 - 4\cdot am}} = 0$

$dh - \dfrac{\sqrt{2}\cdot\sqrt{2\cdot am - am^2}}{2\cdot\sqrt{2 - am}} = 0 \quad hn - \dfrac{\sqrt{9\cdot(2 - am)}}{\sqrt{2}} = 0 \quad jn - \dfrac{6\cdot(2 - am)}{\sqrt{9 - 4\cdot am}} = 0 \quad dj - \dfrac{(3 - 2\cdot am)}{\sqrt{9 - 4\cdot am}} = 0$

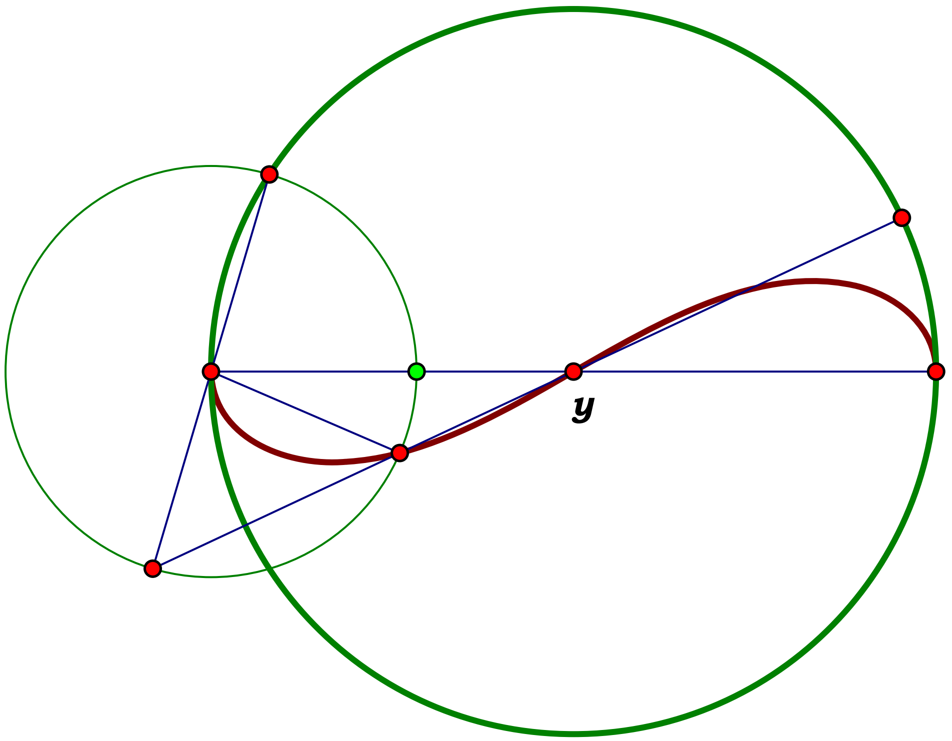
$dp - \dfrac{2\cdot am - 3}{am - 3} = 0 \quad dr - \dfrac{(am - 3)\cdot(2\cdot am - 3)}{(9 - 4\cdot am)} = 0 \quad jr - \dfrac{\sqrt{2\cdot am - am^2}\cdot(3 - 2\cdot am)}{9 - 4\cdot am} = 0$

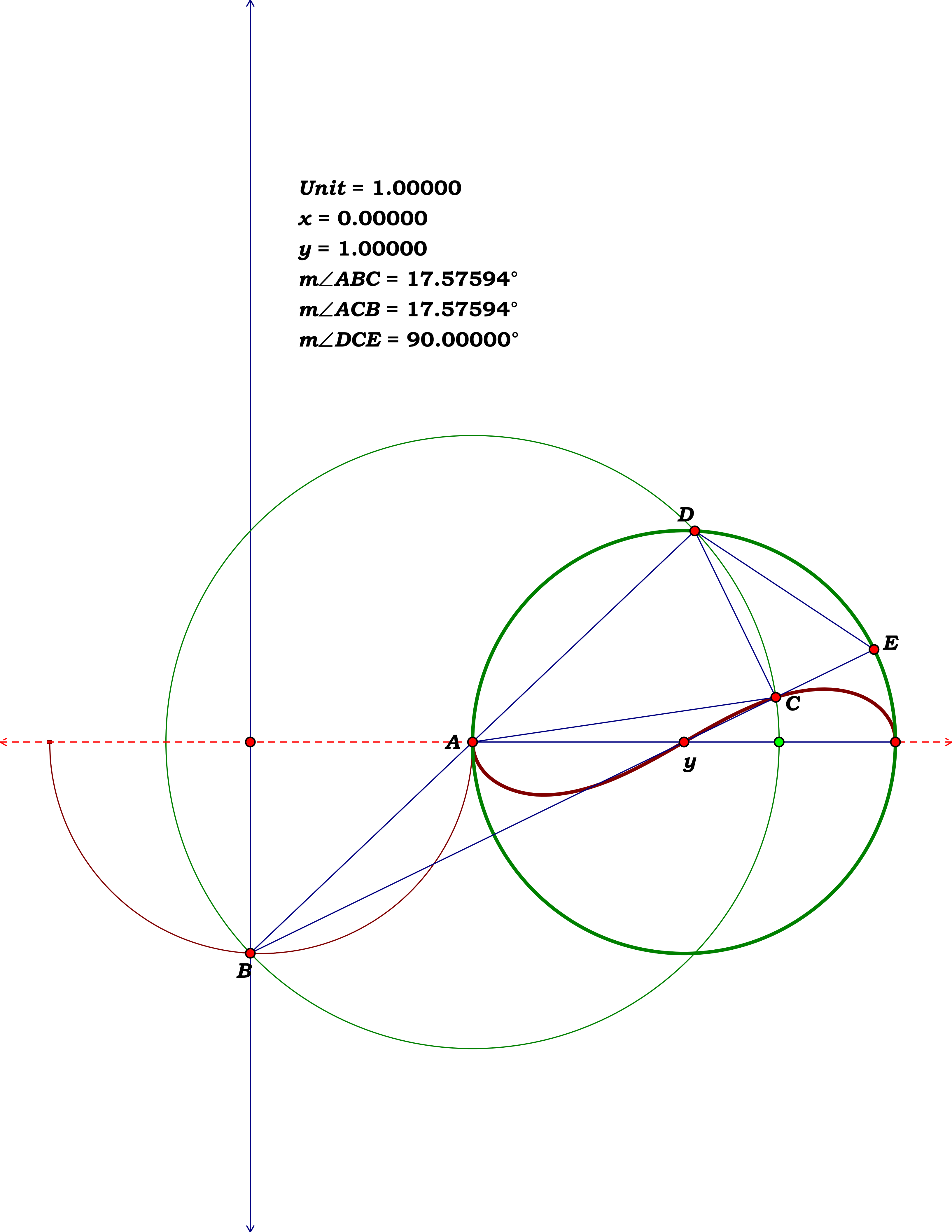
$mr - \dfrac{6\cdot(am - 2)\cdot(am - 3)}{9 - 4\cdot am} = 0 \quad ar - \dfrac{2\cdot am^2 - 21\cdot am + 36}{9 - 4\cdot am} = 0$

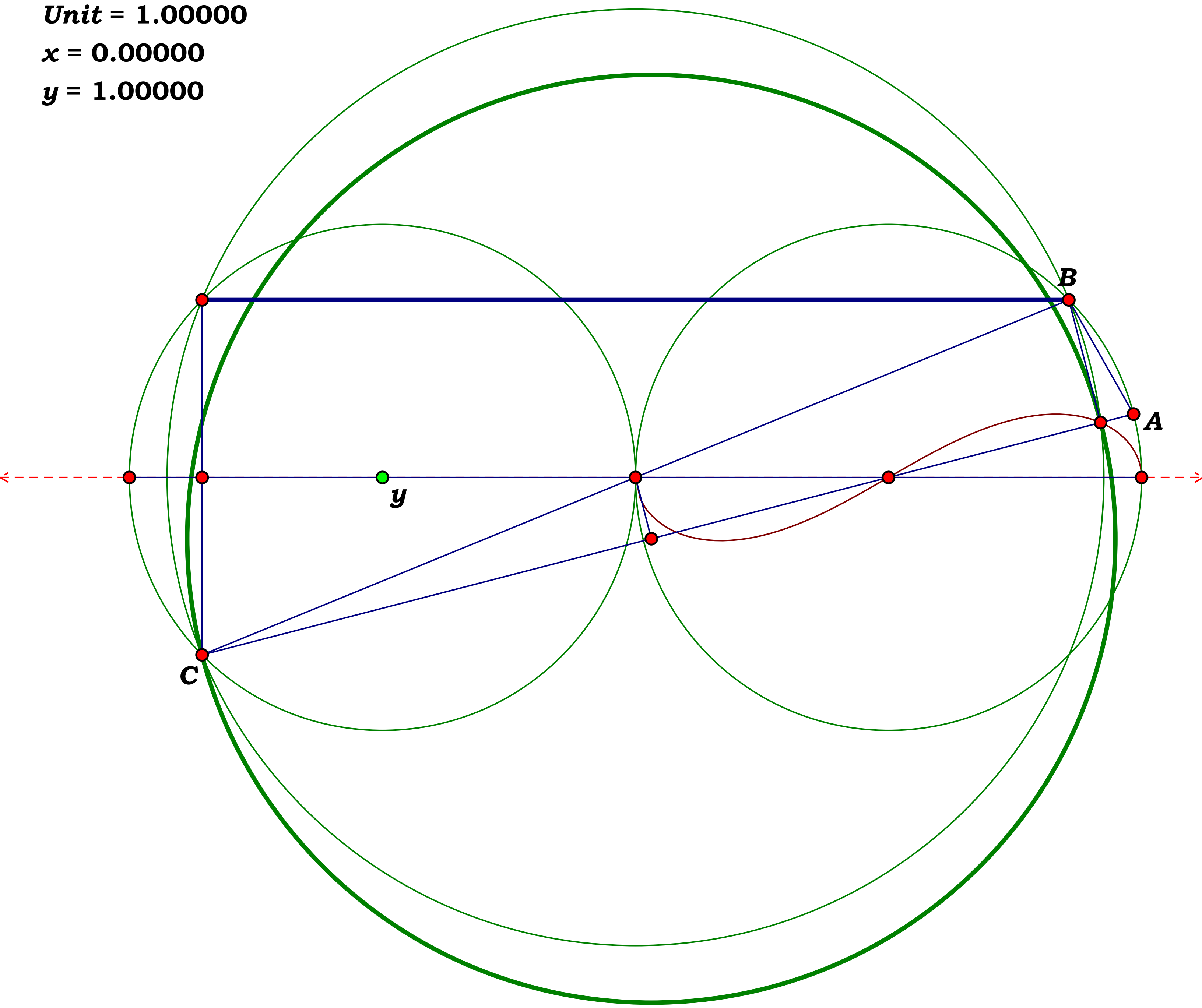
$Unit$ = 1.00000

x = 0.00000

y = 1.00000




Unit = 1.00000
x = 0.00000
y = 1.00000
m∠ABC = 17.57594°
m∠ACB = 17.57594°
m∠DCE = 90.00000°
D
E
C
A
y
B


Unit = 1.00000
x = 0.00000
y = 1.00000
B
A
y
C

$fm = 0.92497$ $\quad fm - \sqrt{2 \cdot m - m^2} = 0.00000$

$fn = 1.84994$ $\quad fn - 2 \cdot \sqrt{2 \cdot m - m^2} = 0.00000$

$fg = 2.76008$ $\quad fg - (4 - 2 \cdot m) = 0.00000$

$gn = 3.32270$ $\quad gn - \sqrt{16 - 8 \cdot m} = 0.00000$

$cn = 1.66135$ $\quad cn - \sqrt{4 - 2 \cdot m} = 0.00000$

$dm = 2.38004$ $\quad dm - (3 - m) = 0.00000$

$dn = 2.55346$ $\quad dn - \sqrt{9 - 4 \cdot m} = 0.00000$

$do = 0.93208$ $\quad do - \frac{3 - m}{\sqrt{9 - 4 \cdot m}} = 0.00000$

$co = 0.36224$ $\quad co - \frac{\sqrt{2 \cdot m - m^2}}{\sqrt{9 - 4 \cdot m}} = 0.00000$

$dh = 0.55676$ $\quad dh - \frac{\sqrt{2} \cdot \sqrt{2 \cdot m - m^2}}{2 \cdot \sqrt{2 - m}} = 0.00000$

$hn = 2.49202$ $\quad hn - \frac{\sqrt{9 \cdot (2 - m)}}{\sqrt{2}} = 0.00000$

$jn = 3.24275$ $\quad jn - \frac{6 \cdot (2 - m)}{\sqrt{9 - 4 \cdot m}} = 0.00000$

$dj = 0.68929$ $\quad dj - \frac{3 - 2 \cdot m}{\sqrt{9 - 4 \cdot m}} = 0.00000$

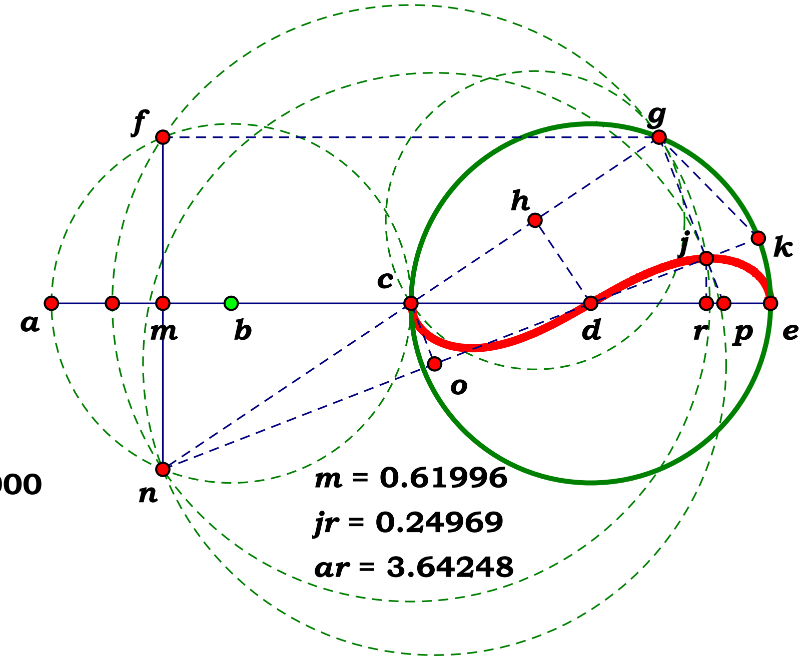
$dp = 0.73952$ $\quad dp - \frac{2 \cdot m - 3}{m - 3} = 0.00000$

$dr = 0.64248$ $\quad dr - \frac{(m - 3) \cdot (2 \cdot m - 3)}{9 - 4 \cdot m} = 0.00000$

$jr = 0.24969$ $\quad jr - \frac{\sqrt{2 \cdot m - m^2} \cdot (2 \cdot m - 3)}{4 \cdot m - 9} = 0.00000$

$mr = 3.02252$ $\quad mr - \frac{6 \cdot (m - 2) \cdot (m - 3)}{9 - 4 \cdot m} = 0.00000$

$ar = 3.64248$ $\quad ar - \frac{2 \cdot m^2 - 21 \cdot m + 36}{9 - 4 \cdot m} = 0.00000$



$m = 0.61996$

$jr = 0.24969$

$ar = 3.64248$

Yin-Yang

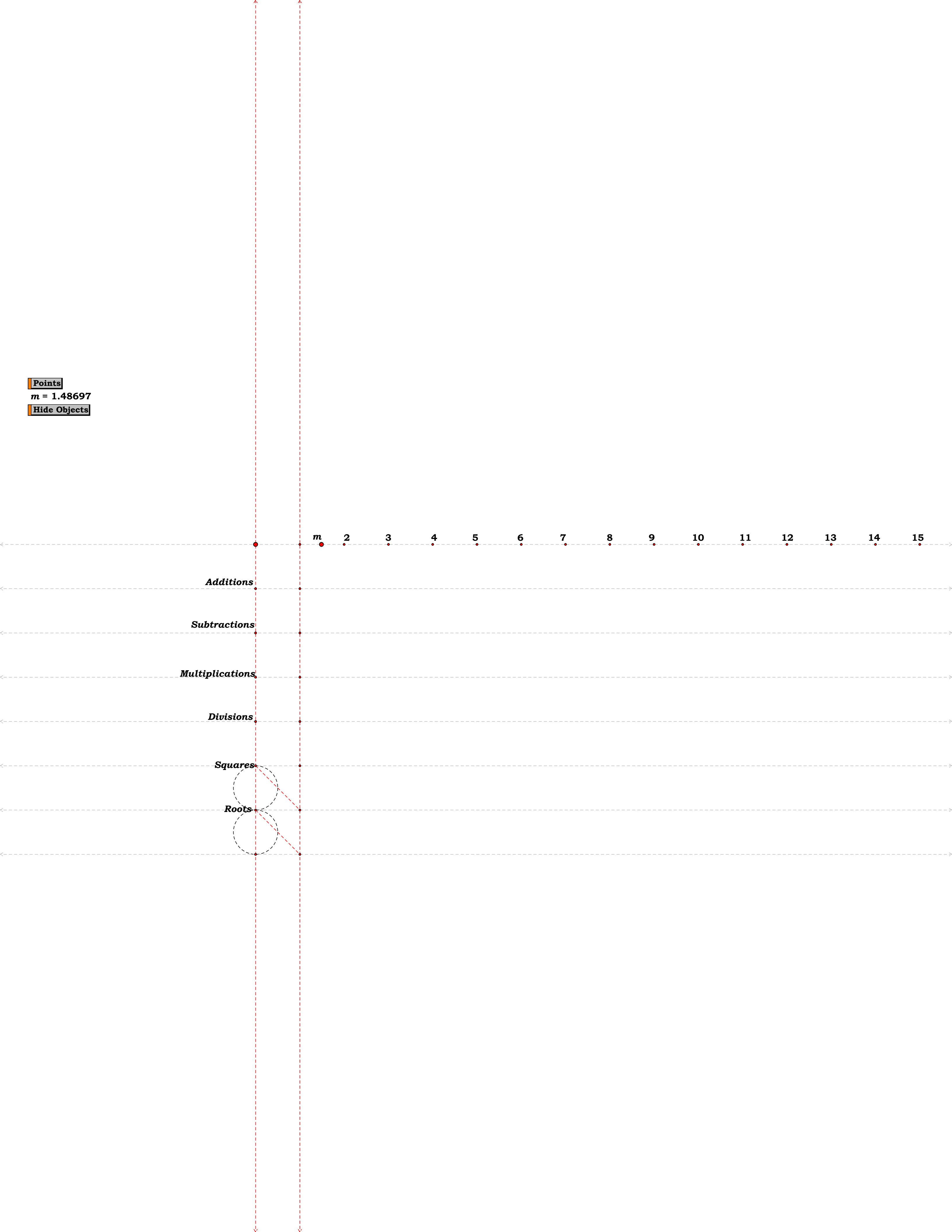
$Unit = 1.00000$

$a = 0.00000$

$b = 1.00000$

$$jr - \frac{\sqrt{2\cdot am - am^2}\cdot(3 - 2\cdot am)}{9 - 4\cdot am} = 0$$

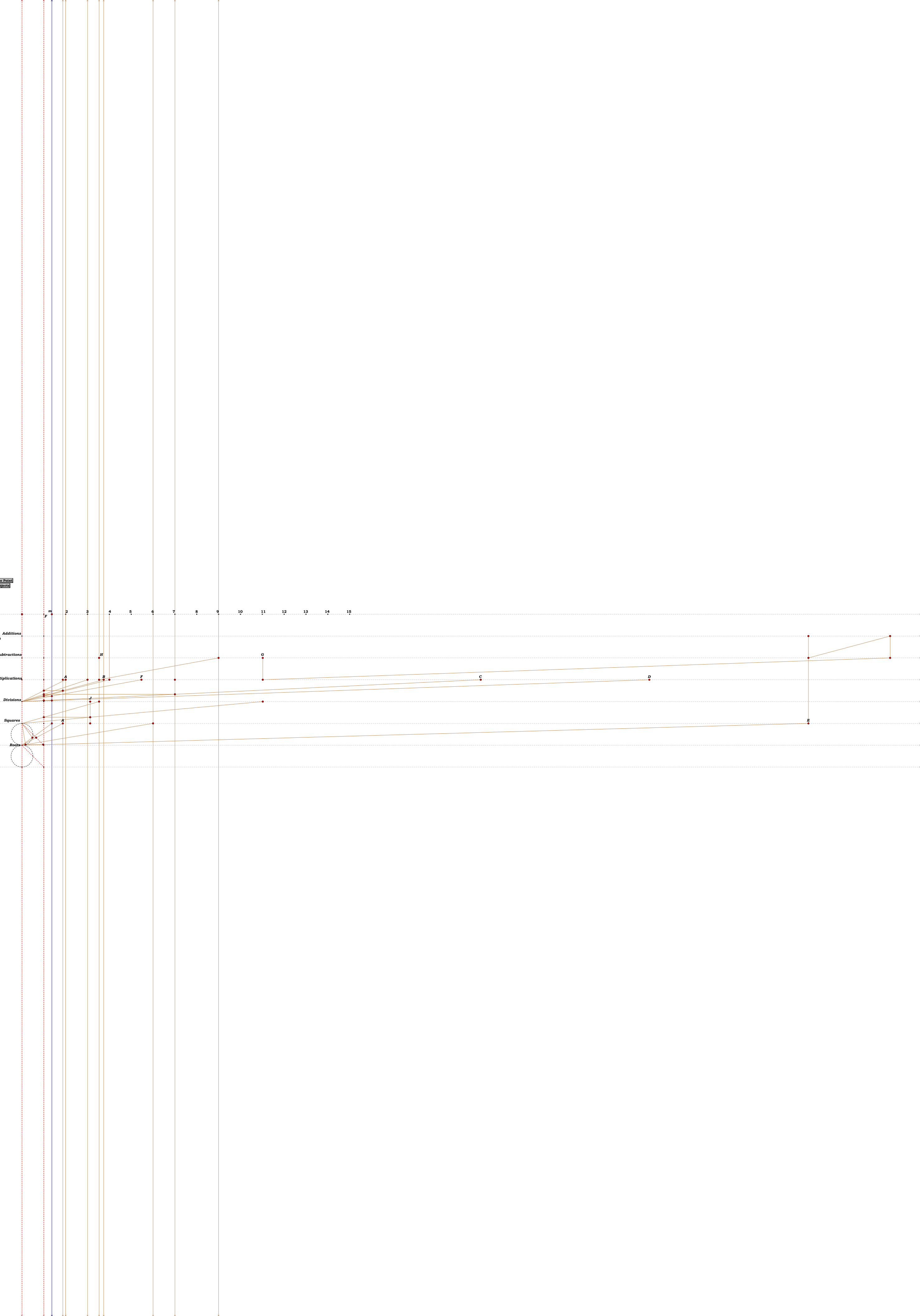
$$ar - \frac{\left(2\cdot am^2 - 21\cdot am + 36\right)}{9 - 4\cdot am} - 0$$


Points
m = 1.48697
Hide Objects
m
2
3
4
5
6
7
8
9
10
11
12
13
14
15
Additions
Subtractions
Multiplications
Divisions
Squares
Roots

Points
Hide Objects

$m = 1.36751$
$A = 1.87008$
$A - m^2 = 0.00000$
$B = 3.74017$
$B - 2 \cdot A = 0.00000$
$C = 21.00000$
$D = 28.71770$
$D - C \cdot m = 0.00000$
$E = 36.00000$
$F = 5.47004$
$F - 4 \cdot m = 0.00000$
$G = 11.02246$
$G - (2 \cdot m^2 - 21 \cdot m + 36) = 0.00000$
$H = 3.52996$
$H - (9 - 4 \cdot m) = 0.00000$
$J = 3.12254$
$J - \frac{2 \cdot m^2 - 21 \cdot m + 36}{9 - 4 \cdot m} = 0.00000$

Animate Point
Hide Objects

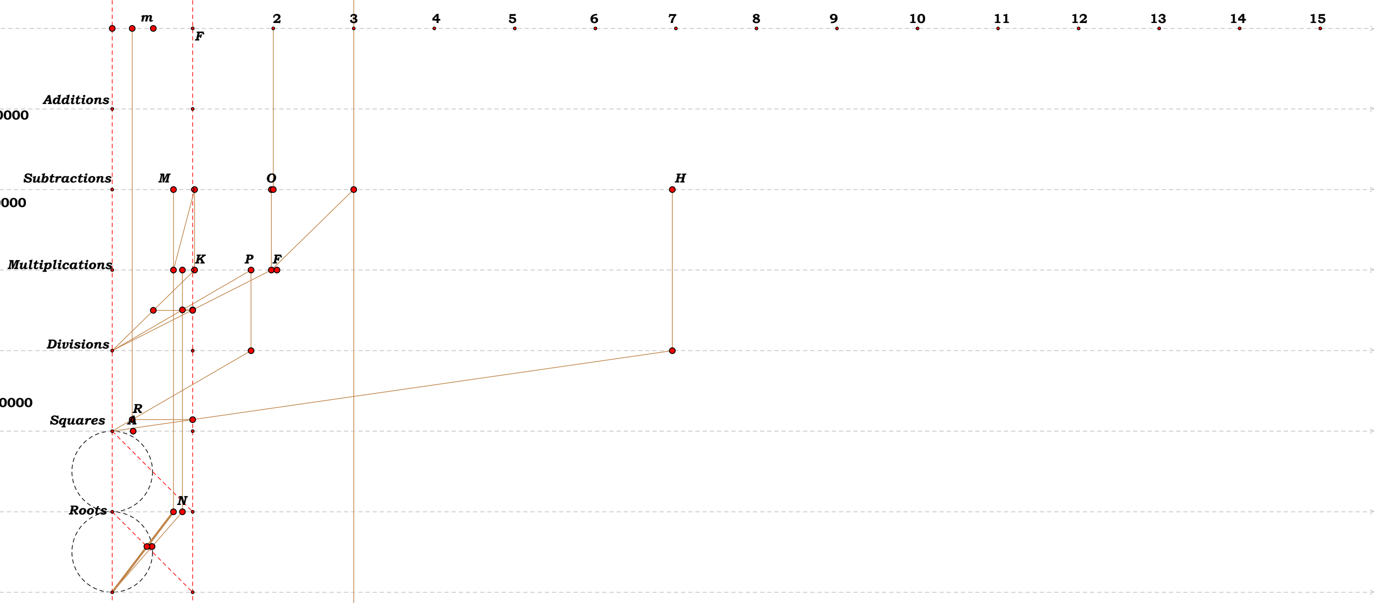


Points
Hide Objects

Animate Point
Hide Objects
Hide Intersections

$$Jr - \frac{\sqrt{2\cdot am - am^2}\cdot(3 - 2\cdot am)}{9 - 4\cdot am} = 0$$

$m = 0.51132$
$A = 0.26144$
$A - m^2 = 0.00000$
$B = 0.52289$
$B - 2\cdot A = 0.00000$
$C = 21.00000$
$D = 10.73762$
$D - C\cdot m = 0.00000$
$E = 36.00000$
$F = 2.04526$
$F - 4\cdot m = 0.00000$
$G = 25.78527$
$G - (2\cdot m^2 - 21\cdot m + 36) = 0.00000$
$H = 6.95474$
$H - (9 - 4\cdot m) = 0.00000$
$J = 3.70758$
$J - \frac{2\cdot m^2 - 21\cdot m + 36}{9 - 4\cdot m} = 0.00000$
$K = 1.02263$
$K - 2\cdot m = 0.00000$
$M = 0.76119$
$M - (2\cdot m - m^2) = 0.00000$
$N = 0.87246$
$N - \sqrt{2\cdot m - m^2} = 0.00000$
$O = 1.97737$
$O - (3 - 2\cdot m) = 0.00000$
$P = 1.72518$
$P - \sqrt{2\cdot m - m^2}\cdot(3 - 2\cdot m) = 0.00000$
$R = 0.24806$



$m = 1.00059$

$A = 1.00118$

$A - m^2 = 0.00000$

Animate Point

$B = 2.00236$

$B - 2 \cdot A = 0.00000$

$C = 21.00000$

$D = 21.01240$

$D - C \cdot m = 0.00000$

$E = 36.00000$

$F = 4.00236$

$F - 4 \cdot m = 0.00000$

$G = 16.98997$

$G - \left(2 \cdot m^2 - 21 \cdot m + 36\right) = 0.00000$

$H = 4.99764$

$H - (9 - 4 \cdot m) = 0.00000$

$J = 3.39960$

$J - \dfrac{2 \cdot m^2 - 21 \cdot m + 36}{9 - 4 \cdot m} = 0.00000$

$K = 2.00118$

$K - 2 \cdot m = 0.00000$

$M = 1.00000$

$M - \left(2 \cdot m - m^2\right) = 0.00000$

$N = 1.00000$

$N - \sqrt{2 \cdot m - m^2} = 0.00000$

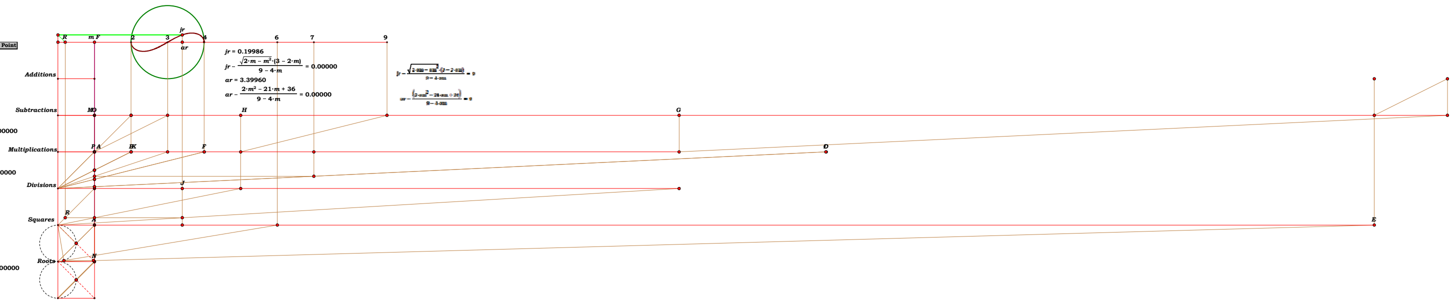
$O = 0.99882$

$O - (3 - 2 \cdot m) = 0.00000$

$P = 0.99882$

$P - \sqrt{2 \cdot m - m^2} \cdot (3 - 2 \cdot m) = 0.00000$

$R = 0.19986$



$m = 1.69974$

$A = 2.88913$

$A - m^2 = 0.00000$

Animate Point

$B = 5.77826$

$B - 2 \cdot A = 0.00000$

$C = 21.00000$

$D = 35.69463$

$D - C \cdot m = 0.00000$

$E = 36.00000$

$F = 6.79898$

$F - 4 \cdot m = 0.00000$

$G = 6.08363$

$G - (2 \cdot m^2 - 21 \cdot m + 36) = 0.00000$

$H = 2.20102$

$H - (9 - 4 \cdot m) = 0.00000$

$J = 2.76400$

$J - \frac{2 \cdot m^2 - 21 \cdot m + 36}{9 - 4 \cdot m} = 0.00000$

$K = 3.39949$

$K - 2 \cdot m = 0.00000$

$M = 0.51036$

$M - (2 \cdot m - m^2) = 0.00000$

$N = 0.71439$

$N - \sqrt{2 \cdot m - m^2} = 0.00000$

$O = -0.39949$

$O - (3 - 2 \cdot m) = 0.00000$

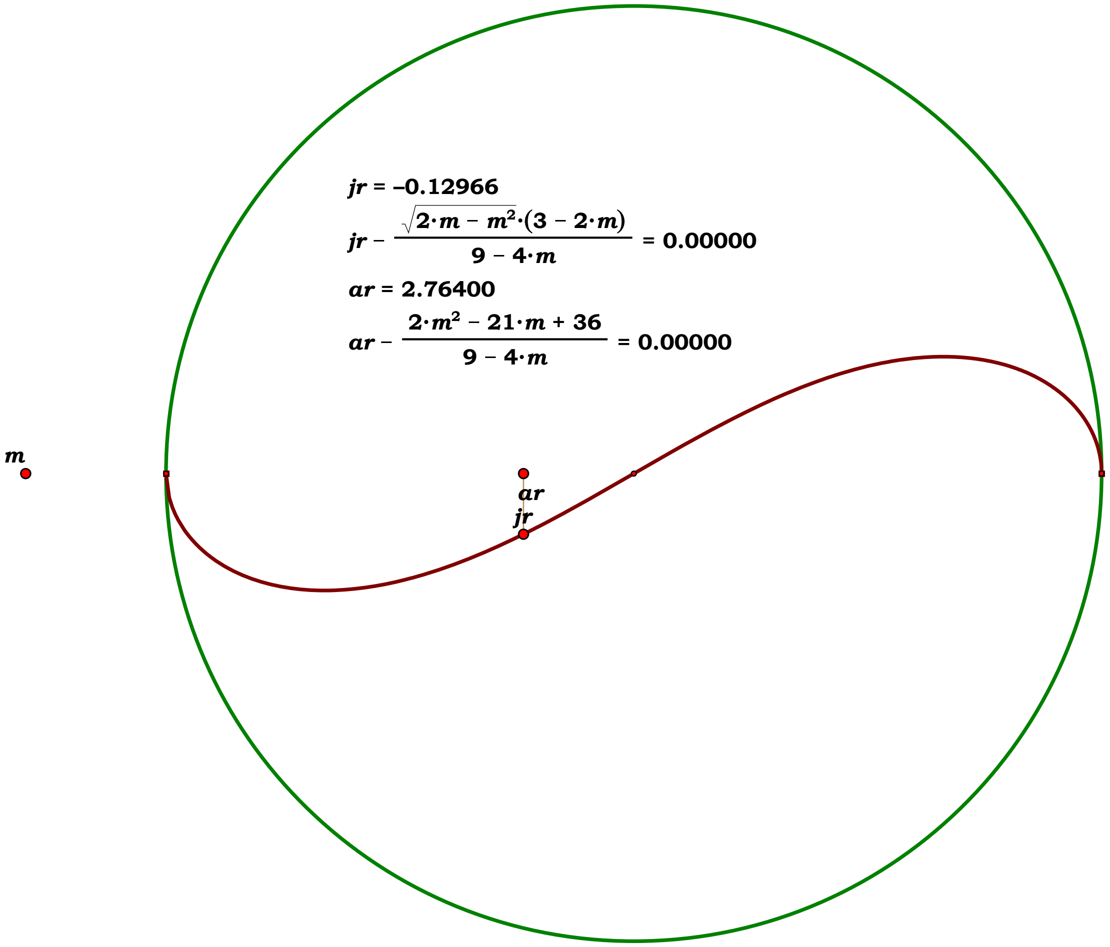
$P = -0.28539$

$P - \sqrt{2 \cdot m - m^2} \cdot (3 - 2 \cdot m) = 0.00000$

$R = -0.12966$

$jr = -0.12966$

$jr - \frac{\sqrt{2 \cdot m - m^2} \cdot (3 - 2 \cdot m)}{9 - 4 \cdot m} = 0.00000$

$ar = 2.76400$

$ar - \frac{2 \cdot m^2 - 21 \cdot m + 36}{9 - 4 \cdot m} = 0.00000$